



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,245	10/10/2001	Roger H. Tracy	29093-03	1190
7590 11/18/2003				
Michael A Mann Nexsen Puet Jacobs & Pollard PO Drawer 2426 Columbia, SC 29202			EXAMINER ALLEN, ANDRE J	
			ART UNIT 2855	PAPER NUMBER

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/889,245	TRACY ET AL.	
	Examiner	Art Unit	
	Andre J. Allen	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13 and 15-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7 is/are allowed.
- 6) ☒ Claim(s) 8-13 and 15-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

DETAILED ACTION

*Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Coe et al in view of Whitehead and further in view of Kitazume. Coe et al teaches the basic features of the claimed invention for example;

In claim 8 a housing 30, said housing having a proximal end and a distal end{fig. 1} range finding means {col.4 lines 25-40}carried within said housing and oriented so that said range finder directs a beam of light; {col. 4 lines 25-40}

In claim 8 Coe teaches a housing that directs a beam of light, but does not explicitly teach a window formed on the housing, however it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a window for the purpose of directing a beam of light (MPEP 2144.04).

In Claim 8 Coe does not teach means for moving range finding means parallel to said window however, Kitazume teaches a system for measuring irregularities in the road that includes a means for moving a laser (col. 7 lines 43-45). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide means for moving a range finding means/laser light within a housing as taught by Kitazume in Coe et al for the purpose of moving a laser ray transmitting and receiving section along a frame from one end to the other (col. 1 lines 53-58). In claim 8 Coe does not teach gripping means being a handle carried by said proximal end of said housing, means carried by said housing in operational connection with a communications port means carried by said handle and tire-engaging means carried by said housing and in operational connection with said range finding means.

Whitehead teaches gripping means 74 being a handle carried by said proximal end of said housing {fig. 11}, means carried by said housing and in operational connection with a communications port means carried by said handle 80 82 84 {fig. 11}, and tire-engaging means 78 carried by said housing {fig. 11} and in operational connection with said range finding means 126 {fig. 1}{abstract}.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the tire profile apparatus taught by Coe et al with gripping means in operational connection with the range finding means as taught by Whitehead for the purpose of having a

portable device to perform a road side tire check (col. 7 lines 9-10), means to engage a side of a tire as taught by Whitehead for the purpose of guiding and maintaining contact with the surface of the tire so that the image window always directly faces the tread (col. 7 lines 25-30), and a communications port as taught by Whitehead for the purpose of sending and receiving tread data.

In claim 9 Coe et al teaches a communications port {abstract} 32 that transmits distance data using infrared transmission 30.

In claim 10 Coe et al does not use radio frequency transmission however, it would have been obvious of to a person having ordinary skill in the art of transmitting data to use a radio frequency, infrared, or any other form of transmitting a signal since they all ultimately perform the same function.

In claim 11 Coe et al being a non-contact apparatus does not teach tire engaging means carried by the proximal end for engaging the side of a tire. Whithead teaches an apparatus that contacts the rolling surface of the tire with the rollers of 78 therefore it would have been obvious to a person in the art of tire analysis at the time the invention was made to engage the surface as taught by Whithead or the side wall for the purpose of maintaining contact, alignment and balance with the surface of the tire so that the image window always directly faces the tread (col. 7 lines 25-30).

In claims 13 Coe et al teaches range finding means {claim 7 ref.} and computer/display 34 but does not teach a hand held computer communication with range finding means having means for plotting distance data.

Whitehead teaches a hand held {fig. 11} computer having a display 82 and

means for plotting data 84. It would have been obvious to a person having ordinary skill in the art to modify the range finding means and computer taught by Coe et al to include a hand held computer 90 as taught by Whitehead and plot whatever data or dimensions needed as taught by Coe et al {abstract} and Whitehead for the purpose of creating a unit that is portable to perform a road side tire check (col. 7 lines 9-10).

2. Claims 15 and 19-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Whitehead. Whitehead teaches the basic features of the claimed invention for example:

In claim 15 a handheld probe 90, scanning the rolling surface with the probe 90, tire-engaging means 78 engaging a rolling face of the tire (col. 7 lines 19-28), communicating to a computer having a display {fig. 11} and plotting profiles on the display 82. However Whitehead does not teach engaging the side of the tire. It would have been obvious to a person having ordinary skill in the art of tire profiling apparatus's at the time the invention was made to contact any surface/side part of a tire for the purpose of guiding and maintaining contact with the surface of the tire so that the image window always directly faces the tread (col. 7 lines 25-30).

With respect to claims 19,20 determining whether tires comply with government regulations, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use government tire regulations to determine whether they are compliant since it is well known in

the tire art that tire manufactures must meet government regulations before they are manufactured or replaced.

In claim 21 Whitehead teaches providing a handheld probe having a handle 74 and a communications port/processor 48 that communicates profiles to a computer 82 84.

In claim 22 Whitehead teaches a communications port that transmits distance data using infrared transmission 41.

In claim 23 Whitehead does not use radio frequency electromagnetic wave transmission however, it would have been obvious of to a person having ordinary skill in the art of transmitting data to use a radio frequency, infrared, or any other form of transmitting a signal since they all ultimately perform the same function and the invention would appear to perform equally well with the data transmission as taught in the cited art.

In claim 24 Whitehead teaches the use of a handheld probe 90 for scanning a tire {fig. 11}.

*Allowable Subject Matter*

3. Claims 1-7 and 25-27 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art does not disclose nor suggest providing a three point contact for preserving the integrity of a line of reference to the tire defined by the movement of the range finding means.

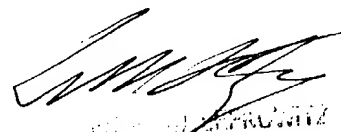
*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre J. Allen whose telephone number is 703-3081989. The examiner can normally be reached on mon-fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 703-305-4816. The fax phone number for the organization where this application or proceeding is assigned is 703-308-3432.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

A.J.A  
Art Unit 2855

  
EDWARD LEFKOWITZ  
SUPERVISOR, PATENT EXAMINER  
TECHNOLOGY CENTER 2855